



Department of Technology, Management and Budget (DTMB) Solutions

April 2013

Agenda

- **History Overview**
- **Cellular**
- **Wi-Fi**
- **Private Radio Network**
- **Mobile VPN**
- **Computers**
- **Mobile LEIN Client**
- **Future**
- **Closing**
- **Questions and Answers**

Michigan State Police Mobile Data

- ◆ 1998 – 2008 MSP started adding Local, Mobile Data Equipment to MSP Cars
 - Grand Haven – Mobile Data Terminals
 - Mt Pleasant – Computer purchased by Tribes
 - Kent County – Private Radio Network
 - MSP Metro Post – Bio-Key Mobile Cop over 1st Generation Cellular

Michigan State Police / Communications

◆ 1995 – Present

- Start Construction of Michigan Public Safety Communication System (7 Zones / 184 Sites)
- Built 7 Dispatch Centers
 - Bay City, Detroit, Gaylord, Lansing, Negaunee, Paw Paw, and Rockford
- Deployed Phase I and II E9-1-1
 - Gaylord, Negaunee, and Rockford
- Consolidated and Closed Centers
 - Bay City, Paw Paw and Rockford

Department of Natural Resources Law Division

- ◆ 1998 – Present
 - Build Report All Poaching (RAP) Room Dispatch
 - 5 Console Positions
 - Deployed a Private Radio Network
 - 150 Low Band Modems
 - 28 Tower State Wide
 - CAD / LEIN Application
 - FleetTrac
 - Mobile Client



Michigan Public Safety Communication System

- ◆ 2004 – Upgrade
 - 6.5 Platform Upgrade added Integrated Voice and Data (IV&D)
 - Premier MDC Message Switch Installed
 - 70 IV&D Devices Deployed
 - Van Buren County Sheriff
 - MSP Paw Paw and South Haven
 - Bangor, Decatur, Hartford, Lawton, etc..
 - Required Background Check

Department of Information Technology (DIT)

- ◆ 2001 Executive Order creating Department of Information Technology
- ◆ 2010 merged DIT and the Department of Management and Budget, creating the Department of Technology, Management and Budget

Department of Technology, Management and Budget

- ◆ Enterprise Architecture Team
 - Team of subject matter experts
 - Review Deny/Approve Solution Assessments
 - Review to reduce State supported solution
 - Review law compliance
 - Review policy compliance
 - Review for Industry Standard
 - Document Technology Road Maps (Life Cycle)
 - Host Technology / Vendor Spotlights

Department of Technology, Management and Budget

- ◆ Infrastructure Service Request
 - Review ISR / Assign Resource
 - Technical Services
 - Server OS/Hardware Configuration
 - Deploy Physical and Virtual Servers
 - Harden Operating Systems
 - Scan Server for Vulnerabilities
 - Quarterly Operating System Patching
 - Provide Solutions for Non Standard Applications

Department of Technology, Management and Budget

- Telecom

- Manage SoM Networks, To Locals, Courts, Vendors
- Firewall Management
- Implement approved Firewall Rules
- Manage CBDS / VPN
- Manage RSA SecurID Appliances

Department of Technology, Management and Budget

- Michigan Cyber Security (Office Enterprise Security)
 - Approve / Audit Firewall Rule
 - Document Risk (DIT-170)
 - Data Classification
 - Audit Vulnerability Server Scan
 - Monitor Network Security

Department of Information Technology

- Office of Automation
 - Manage Anti-Virus Appliances
 - Hard Disk Encryption
 - Manage Client Computer
 - Patch Client Computers
 - Active Directory

Cellular

◆ Goals

- Coverage M-55 and South
- Review New Technologies
- Become Carrier Agnostic
- Leverage SoM Infrastructure



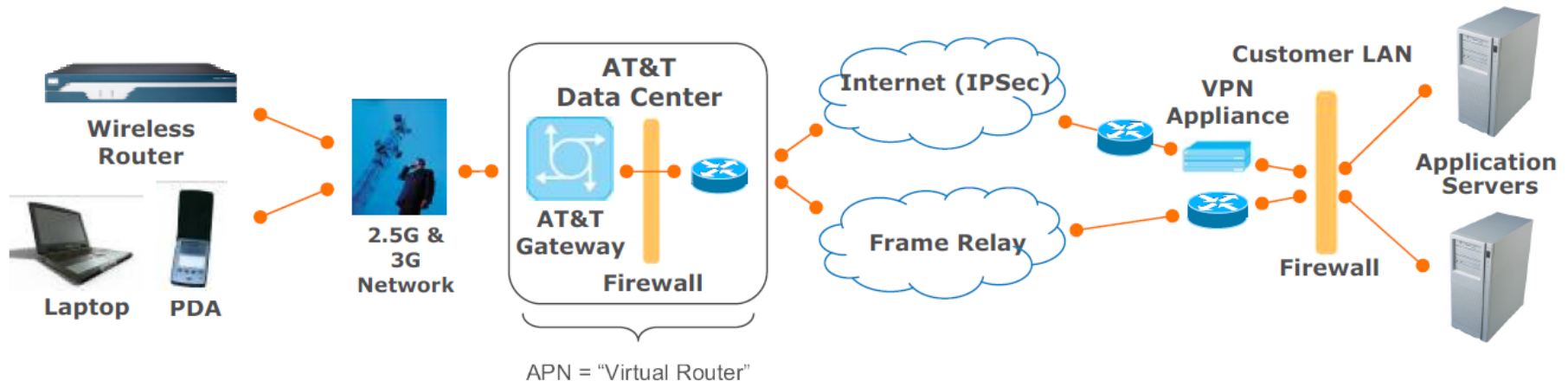
Cellular Carrier Spotlights

- ◆ Technology Spotlight
 - Gathered High Level Requirements
 - Created and Sent Request for Product Presentation and Presentation Cover letter to Vendors
- ◆ Product Presentation
 - Invited End Users, Enterprise Security, Telecom, Enterprise Architecture
 - Limited to 90 Minute Presentation
 - Attending Personal Evaluated each Vendor on presentation and technology

Cellular – Deployment

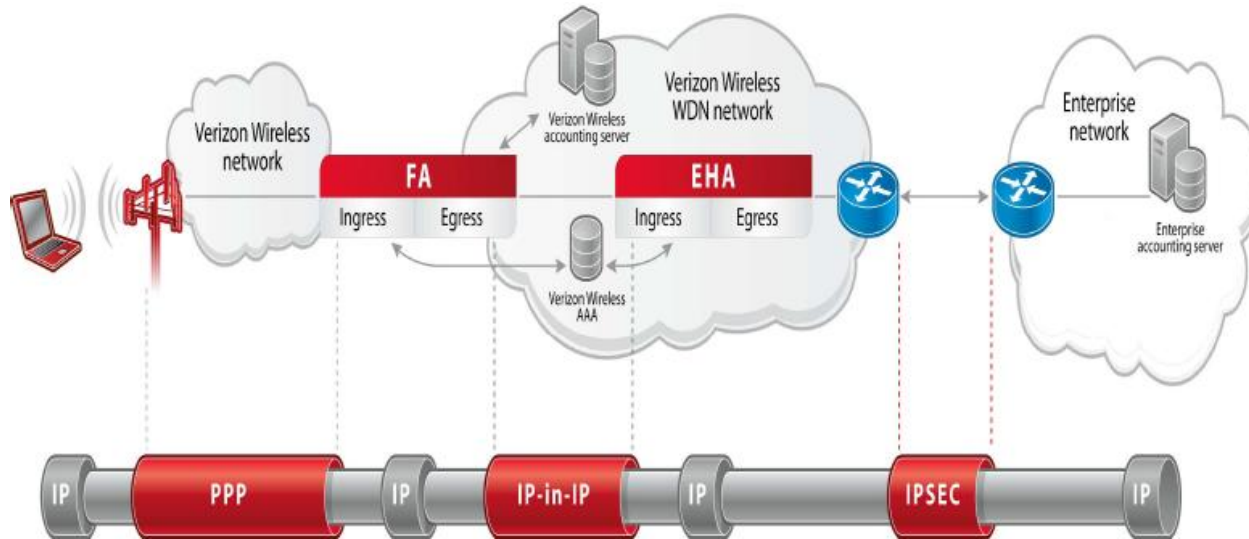
◆ AT&T Mobility

- APN Already Existed
- Static Addressing
- Refresh AT&T Private APN to SoM Network
- Request New Firewall Rule



Cellular – Deployment

- ◆ Verizon Wireless
 - Vendor Gateway to Gateway
 - DHCP Address
 - Multiple APN and Address Spaces



Wi-Fi

◆ Goals

- Leverage SoM Infrastructure
 - Access Point already deployed
 - SoM / Internet Access Controls In place
 - Support Model
- Ability to Roam SoM AP w/o User Intervention
- Future Public Access Points
 - Issues
 - Support ability
 - User Rights
 - Terms and Use

Wi-Fi

- ◆ Telecom / Enterprise Security
 - Developed Network Design
 - Question Sent to FBI for clarification
 - Define User (Law Enforcement Only)
 - Michigan State Police
 - DNR Law Division
- ◆ Deployment
 - Pilot Solution Assessment
 - Two Site Pilot (Training Academy / MDOT Grand Rapids)
 - Document Risk (DIT-170)
 - Pilot to Production Solution Assessment

Private Radio Network

◆ Goals

- State Wide Data Coverage
- Design to Include Inter operability to Public Safety Agencies at all levels of government
- Plan for Future Data Technologies
 - FirstNet

Mobile VPN

◆ Goals

- Relative ease/difficulty of product use for a typical end user
- Method of Security
- Support for Mobile wireless
- Centralized management
- Scalability
- Compatibility with typical systems/applications



Mobile Virtual Private Network (VPN) Spotlights

- ◆ Technology Spotlight
 - Gathered High Level Requirements
 - Created and Sent Request for Product Presentation and Presentation Cover letter to Vendors
- ◆ Product Presentation
 - Invited End Users, Enterprise Security, Telecom, Enterprise Architecture
 - Limited to 90 Minute Presentation
 - Attending Personal Evaluated each Vendor on presentation and technology

NetMotion Implementation

- ◆ Pilot Deployment
 - Network Firewall Rules
 - AT&T APN
 - 1 Server DMZ, 2 Servers High Zone
 - NTLM Authentication for Client
 - 3rd Party Vendor Verify NetMotion Configuration
- ◆ Pilot to Product
 - Started Roll Out to Post
 - Password Management
 - County CAD's

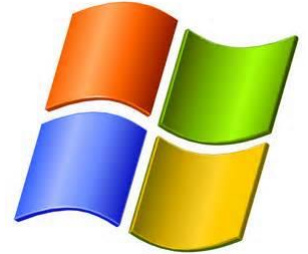
NetMotion – Regional Policing Plan

- ◆ MSP – Regional Policing Plan
 - Server OS Refresh
 - Deployed RSA SecurID (1500 – MSP)
 - Increase Subnet Size
 - Added Wi-Fi
 - Added Verizon
 - Future Web Access
 - NetMotion Client's added Advanced Authentication
 - DMZ Mobility Server's added Advanced Authentication

Computer / Mobile Devices

◆ Clients

- MSP Clients Joined to MSP Domain
- DNR Clients Joined to SoM Domain
- Deployed with NetMotion Mobile VPN
- McAfee Endpoint Hard Disk Encryption
- Symantec Endpoint Protection
 - Antivirus and Antispyware Protection
 - Proactive Treat Protection
 - Network Threat Protection
 - Network Access Control
- Security Patch and Updates pushed with SCCM



Symantec Endpoint Protection



MagStripe Readers

◆ Devices Requirements

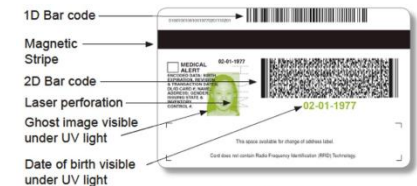
■ AAMVA Standards

- Driver Licenses Standard
- Format of Information

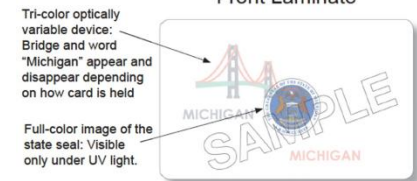
- Magnetic Strip
- 2-D Bar Code
- 3-D Bar Code

■ Human Interface Device (HID) Format

- Bio-Key Code Support HID
- Premier MDC Code Modified to Support HID



Front Laminate



Effective: March 2011 --- www.Michigan.gov/sos



Cellular Hardware

- ◆ Cellular Hardware
 - Gobi
 - Sierra Wireless Modems
 - Blue Tree

LaptopConnect Cards



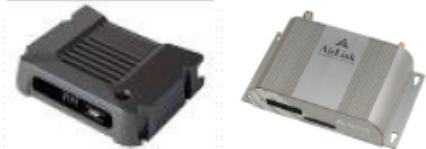
Integrated Laptops

SONY
Panasonic



lenovo

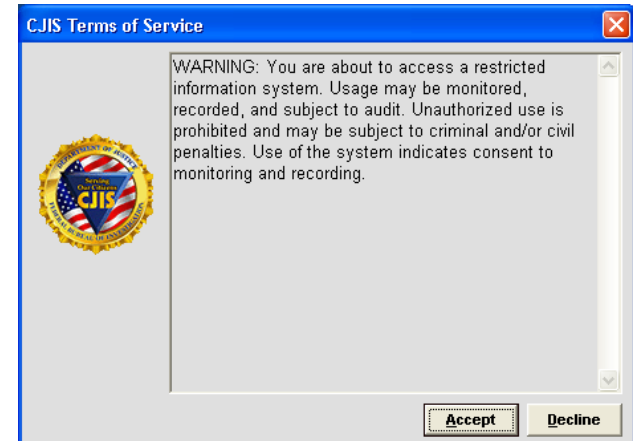
Trunk Mounted Modems



Mobile Applications - LEIN

◆ Mobile LEIN

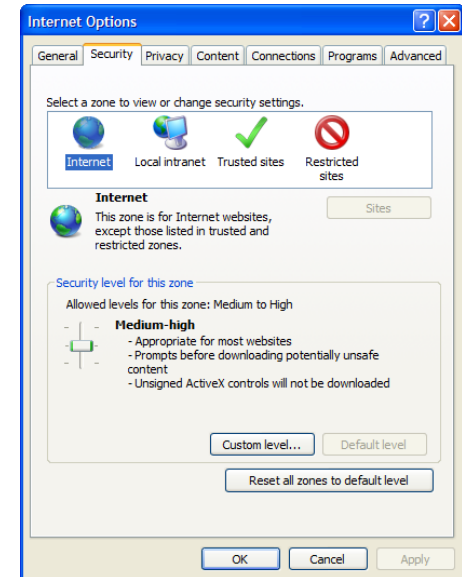
- Existing Licensed Client
 - Bio-Key Mobile Cop
 - Motorola Premier MDC
- Requirements
 - CJIS 5.0 Compliance (Draft)
 - MPSCS IV&D and Cellular Networks
 - Compared Functionality
- Deployment
 - Application Installed / Server Hardened
 - Application Hardened



Mobile Application - Web Apps / Resources

◆ Internet Explorer

- Internet Apps / Resources
- Intranet Apps / Resources
 - Officer Daily
 - MSP Web
 - MiCJIN Portal
- Setting
- Network Access Controls
 - Intranet Access via SoM managed Firewall's
 - Internet Access via Proxy / Blue Coat WebSense



Future

- ◆ Automatic Resource Locator
- ◆ Remote Monitor and Configuration Mobile Devices
- ◆ FirstNet (Public Safety LTE)
- ◆ BlueTooth
- ◆ Reduction of User Logins
- ◆ Dispatch Centers

Closing

- ◆ Where is the State heading with implementing a solution that locals can use?
- ◆ Would this be only 800MHz users or other local connections (i.e. cellular to their county)?
- ◆ What is the solution, how do agencies find out more info etc.

Question and Answers

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Thank you